

MATERIAL SAFETY DATA SHEET

1. Identification of The Substance/Mixture and of The Company/Undertaking

Identification of the substance/preparation

Product name LNP-mRNA

Company/undertaking identification

VectorBuilder Inc.
1010 W 35th Street, Suite 515
Chicago, IL 60609, USA
Tel: (800) 517-2189
(9:00 am to 5:30 pm CST)

Emergency telephone number

Tel: (800) 517-2189
(9:00 am to 5:30 pm CST)

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

2. Hazards Identification

Hazard classification

None

Signal word

Not hazardous

Health hazards

Not hazardous

Physical hazards

Not hazardous

HMIS

Health	0
Flammability	0
Reactivity	0

3. Composition/Information on Ingredients

Hazardous/non-hazardous components

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

4. First Aid Measures

Skin contact	Rinse with plenty of water. If symptoms arise, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Ingestion	Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.
Inhalation	Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.
Notes to physician	Treat symptomatically.

5. Fire-fighting Measures

Suitable extinguishing media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical.
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.

6. Accidental Release Measures

Personal precautions	Use personal protective equipment.
Methods for cleaning up	Take up mechanically and collect in suitable container for disposal.

7. Handling and Storage

Handling	Handle as a potentially biohazardous material under Biosafety Level 1 containment. Avoid contact with eyes and skin. Wear personal protective equipment when handling.
Storage	Store at -80°C. Keep in properly labeled containers.

8. Exposure Controls/Personal Protection

Exposure limits

We are not aware of any national exposure limit.

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Hand protection	Wash hand after use. Gloves recommended.
Eye protection	Safety glasses or goggles recommended.
Skin and body protection	Lightweight protective clothing.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls

Prevent product from entering drains.

9. Physical and Chemical Properties

General information

Form	Liquid	Evaporation rate	No information available
pH value	7.0-7.4	Vapor pressure	No information available
Appearance	Colorless to slightly white	Vapor density	No information available
Odor	No information available	Partition coefficient	No information available
Odor threshold	No information available	Decomposition temperature	No information available
Oxidizing properties	No information available	Viscosity	No information available
Water solubility	Soluble		
Boiling point/range	°C no data available	°F no data available	
Melting point/range	°C no data available	°F no data available	
Flash point	°C no data available	°F no data available	
Autoignition	°C no data available	°F no data available	

10. Stability and Reactivity

Stability	Stable under recommended handling and storage conditions.
Materials to avoid	No data available
Hazardous decomposition products	No data available
Polymerization	Hazardous polymerization does not occur.
Reactivity	No data available
Possibility of hazardous reactions	Hazardous reaction has not been reported.

11. Toxicological Information

Acute toxicity

Not hazardous

Principle routes of exposure/potential health effects

Eyes	May cause eye irritation with susceptible persons.
Skin	May cause skin irritation in susceptible persons.
Inhalation	May be harmful if inhaled.
Ingestion	May be harmful if swallowed.

Specific effects

Carcinogenic effects	None
Mutagenic effects	None
Reproductive toxicity	None
Sensitization	None

Target organ effects

No known effects under normal use conditions.

12. Ecological Information

Ecotoxicity effects	No data available
Mobility	No data available
Biodegradation	Inherently biodegradable
Bioaccumulation	Does not bioaccumulate

13. Disposal Considerations

Dispose of contents/containers in accordance with local regulations.

14. Transport Information

IATA

Proper shipping name	Not classified as dangerous in the meaning of transport regulations.
Hazard Class	No information available
Subsidiary Class	No information available
Packing group	No information available
UN-No	No information available

15. Regulatory Information

US Federal regulations

SARA 313

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs.

US State regulations

California Proposition 65

This product does not contain chemicals listed under Proposition 65.

WHMIS hazard class

Non-controlled

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

16. Other Information

Reason for Revision MSDS sections updated.

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

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End of Safety Data Sheet